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TITLE: Structure for fixing noise filter of drum washing machine

INVENTOR: KWON, I G; SONG, M S

PATENT-ASSIGNEE: LG ELECTRONICS INC[GLDS]

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ABSTRACTED-PUB-NO: KR2003071985A

BASIC-ABSTRACT:

NOVELTY - A structure for fixing a noise filter of a drum washing machine is provided to prevent the noise filter from being separated by vibration generated in operating the washing machine.

DETAILED DESCRIPTION - A structure for fixing a noise filter(60) of a drum washing machine is composed of first and second fixed ends(62a, 62b) formed at both sides of a filter case(62), wherein the noise filter is embedded; the first fixed end fixed to a cabinet body(52) by a screw(S); and the second fixed end inserted and fixed in a holder(66) mounted in the cabinet. The holder is made into a

recessed groove of which a side is opened to insert the second end in the holder to prevent the second fixed end from being separated from the holder in vibrating.

CHOSEN-DRAWING: Dwg.1/10

TITLE-TERMS: STRUCTURE FIX NOISE FILTER DRUM WASHING MACHINE

DERWENT-CLASS: X27

EPI-CODES: X27-D01A;



The noise filter mounting of a drum washer [The noise filter mounting of a drum washer]

Brief Description of the Drawings

Figure 1 is a perspective view, in which the noise filter fixing structure of the drum washing machine is illustrated the perspective view in which in fig. 3, the noise filter fixing structure of the drum washing machine is illustrated, and the perspective view in which in fig. 4, the state where the noise filter of the drum washing machine is fixed is illustrated according to the perspective view in which the general drum washing machine is illustrated, and fig. 2 is the prior art.

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52: cabinet main body 60: noise filter.

62: filter case 62a: first fixed end.

62b: second fixed end 64: positioning unit.

66: holder.

The Detailed Description of Invention

The Purpose of Invention

Field of Invention and the Prior Art

The present invention relates to the noise filter fixing structure of the drum washing machine, particularly, to the noise filter of the drum washing machine which can prevent that the noise filter is broken away from by the vibration generated with the drum washing machine on operation.

Generally, as to the drum washing machine, a laundry does not get tangled. And with washing by using the rubbing between the laundry rotated in the state where a detergent, the washing water and laundry are put into within the drum which is horizontal, is installed with the driving force of the motor and a drum it nearly does not have the damage of a laundry and it knocks and the effect of washing has as to ...

Figure 1 is a perspective view in which the drum washing machine is illustrated being general. Figure 2 is a perspective view in which the noise filter fixing structure of the drum washing machine is illustrated according to the prior art.

Generally, the drum washing machine is horizontal, as shown in Figure 1, it is made of drum (4), and the motor (non illustration) in which the installed tub (non illustration), and the washing of a laundry it is installed to be rotatable in the tub inner side are made in the cabinet main body (2) inner side in which the whole is open. The motor (non illustration) is behind installed with the tub (4) and is connected by the drum (4) and axis of rotation (non illustration) and rotates the drum (4).

And in the cabinet main body (2) front side, the cabinet cover (3) in which the insert hole (h) is formed is installed so that a laundry be input by the drum (4) inside, in order to prevent in the insert hole (h) from a laundry being broken away from of the drum (4), it is opened and closed, the door (8) is installed.

In the meantime, in the frontal upper side of the cabinet main body (2), the control fittings (non illustration) is installed at the control panels (10) and the inner side controlling the operation of the drum washing machine. The water supply valve (non illustration), the drain valve (non illustration) and motor etc. the control fittings (non illustration) is connected in terms of the wire.

Therefore, so that because the control signal is delivered according to the wire connecting the apparatuses as described above, the signal which does not desire in the control signal which is generated in the wire in-between as the drum washing machine operates with the external noise is generated or it prevent from the control signal being attenuated, the noise filter (10) is installed at the different place.

Particularly, as shown in Figure 2, the noise filter (10) which is built in the filter case (12) is fixed to the inner side after the cabinet main body (2). Respective first and second fixed ends (12a, 12b) are formed in filter case (12) up and down end. First and second fixed ends (12a, 12b) are sliding inserted in first and second holders (14a, 14b) in which the respective cabinet main body (2) backplane is formed the inner side with forming.

Here, as to the first holder (14a), bottom side are formed so that one side and bottom side be opened. The second holder (14b) is formed so that one side and upper be opened and a part and the second fixed end (12b) of the first fixed end (12a) are sliding inserted in the respective first and second holders (14a, 14b). And the first fixed end (12a) is fixed to the cabinet main body (2) with the screw (S).

But there is a problem that as to the noise filter fixing structure of the drum washing machine according to prior art, first and second fixed ends (12a, 12b) of the filter case (12) in which the noise filter is built are sliding inserted in first and second holder (14a, 14b). The second fixed end (12b) is rotated around the screw (S) in case the drum washing machine vibration when operating is generated because the first fixed ends (12a, 12b) are fixed to the cabinet main body (2) to the screw (S) and it is broken away from the second holder (14b), the noise is generated in the filter case (12) secession.

Technical Problems to be solved by the Invention

It are an object of the present invention to provide the noise filter fixing structure of the above-described drum washing machine which is to solve problems with the conventional technology worked out, and can fix so that the filter case in which the noise filter is built in be broken away from a cabinet although the drum washing machine vibration when operating is generated.

The Structure and Function of the Invention (Device)

Provided is the noise filter fixing structure of the drum washing machine in which the noise filter fixing structure of the drum washing machine for solving the above-described subject first and second fixed end are formed in both ends of the filter case in which the noise filter is built in: the first fixed end is fixed with a screw to a cabinet; and it is inserted into the holder formed in a cabinet and the second fixed end is fixed, in which a holder is the groove in which one side is opened so that the second fixed end be pressed so that the second fixed end be broken away from a holder in a vibration.

Referring to the figure below, and the embodiment of the present invention are circumstantially illustrated.

Figure 3 is a perspective view in which the noise filter fixing structure of the drum washing machine is illustrated according to the present invention. Figure 4 is a perspective view in which the state where the noise filter of the drum washing machine is fixed is illustrated according to the present invention.

As to the noise filter fixing structure of the drum washing machine, in order not to be broken away from by the drum washing machine vibration when operating it is built in the filter case (62) inner side and as shown in Figure 3, the noise filter (60) installed at the motor (non illustration) the signal which does not desire is generated in the delivered control signal with the external noise is fixed to the cabinet main body (52) backplane according to several wires.

Here, as to the filter case (62), the inner side is formed with forming so that the respective positioning unit (64) and holder (66) of respective first and second fixed ends (62a, 62b) be protruded in up and down end in location corresponding to first and second fixed ends (62a, 62b) of the filter case (62) in the cabinet main body (52) backplane it is formed the inner side of the cabinet main body (52).

Particularly, the positioning unit (64) is the square shape recess in which the bottom side and one side are opened so that the top one side edge of the first fixed end (62a) be inserted. The holder (66) is the recess of the square shape which the upper is opened so that the second fixed end (62b) be inserted.

And of the boss (8) in which the screw thread is formed in the inner side is formed in one side of the filter case (62) and the first fixed end (62a) so that the filter



case (62) be fixed to the cabinet main body (52) with the screw (S).

As to the noise filter fixed sequence of the drum washing machine according to the present invention constructed as described above and action, it is the same as that of the next time.

Firstly, as shown in Figure 4, the second fixed end (62b) of the filter case (62) is inserted into the holder (66) formed in the inner side after the cabinet main body (52). While in the first fixed end (62a) of the filter case (62), the top one side corner is rotated around the second fixed end (62b), a part is sliding inserted in the positioning unit (64) formed in the inner side after the cabinet main body (52).

And the boss (B) formed in the first fixed end (62a) and filter case (62) is connected by the cabinet main body (52) and screw (S).

The noise filter (60) in which the wire is rolled inside a next, and the filter case (62) is built in.

Therefore, although the drum washing machine is operated and a vibration is generated top and bottom or right and left, the filter case (62) the second fixed end (62b) is inserted into the holder (66). It is not broken away from the cabinet main body (52) since the first fixed end (62a) is fixed to the cabinet main body (52) with the screw (S).

Effect of Invention(Device)

The noise filter fixing structure of the drum washing machine according to the present invention constructed as described above has the advantage that first and second fixed end formed in both ends of the filter case in which the noise filter is built are fixed to the positioning unit formed in the backplane of a cabinet with forming and the holder in which one side is opened. The second fixed end is inserted in a holder. It fixes so that the filter case be broken away from a cabinet although the drum washing machine vibration when operating is generated because of the first fixed end being sliding inserted in the positioning unit and being fixed to a screw, the generated noise can be prevented in the filter case secession.

Scope of Claim(s)

Claim [1]

The noise filter fixing structure of the drum washing machine in which first and second fixed end are formed in both ends of the filter case: the first fixed end is fixed with a screw to a cabinet; and it is inserted into the holder formed in a cabinet and the second fixed end is fixed that the noise filter is built in, wherein a holder is the groove in which one side is opened so that the second fixed end be pressed so that the second fixed end be broken away from a holder in a vibration.

Claim [2]

The noise filter fixing structure of the drum washing machine of claim 1, wherein in a holder, a part is formed into the square shape with forming so that a part of a cabinet be protruded the inner side.

Claim [3]

The noise filter fixing structure of the drum washing machine of claim 1, wherein in a cabinet, the positioning unit in which the corner of the first fixed end is sliding inserted is formed in order to catch the fixed location in which the first fixed end is fixed to a cabinet.

Claim [4]

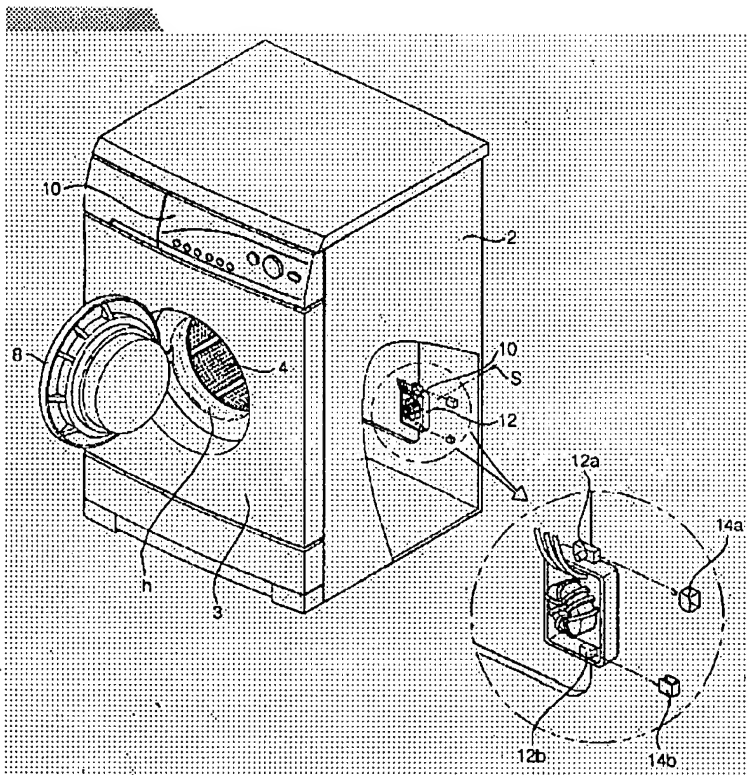
The noise filter fixing structure of the drum washing machine of claim 3, wherein the positioning unit is the recess which is formed into the square shape in which a part is opened with forming so that the cabinet a part be protruded the inner side.

Drawing



Drawing(s)





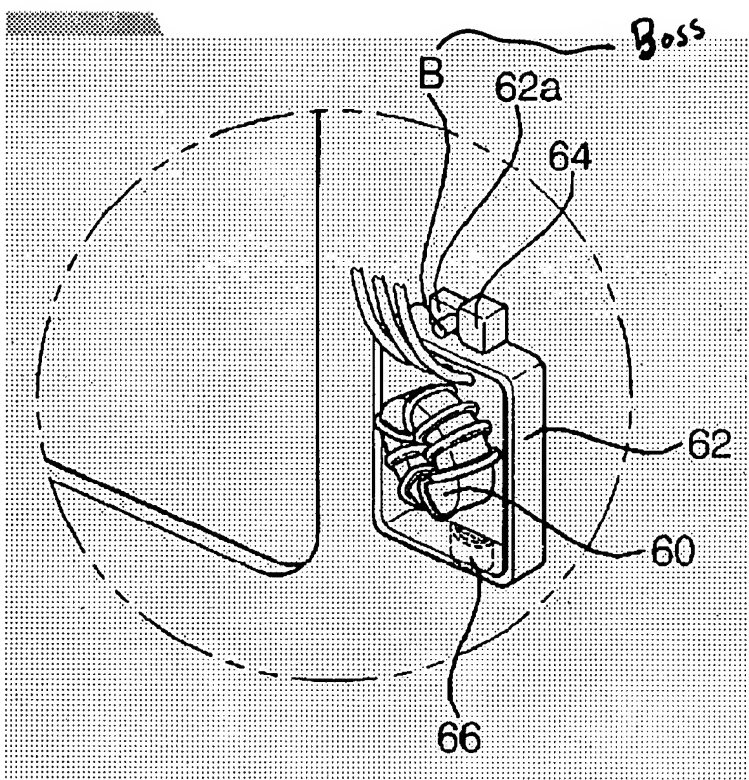
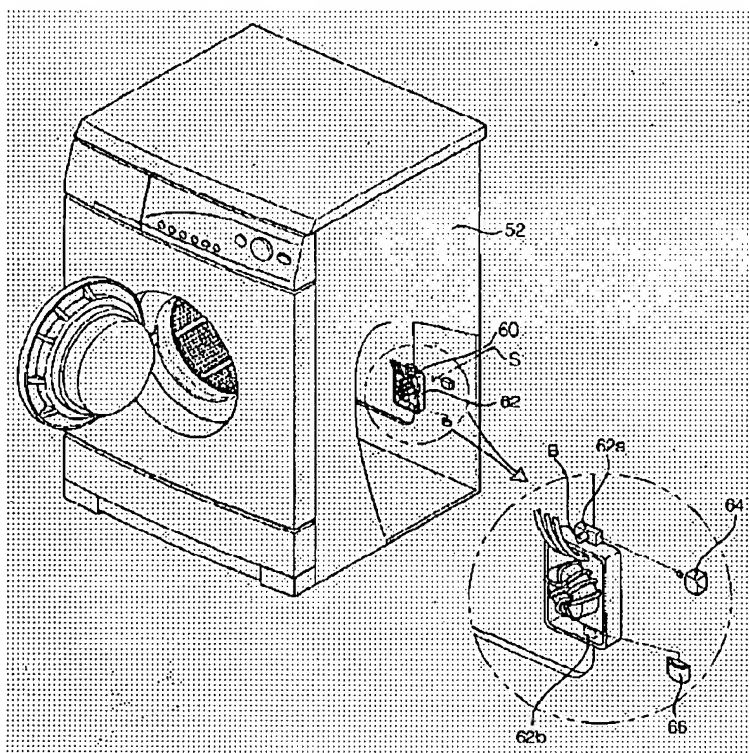


Fig. 4